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EXAMINER

AMINI, JAVID A

ART UNIT

PAPER NUMBER

2672

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,515

Applicant(s)

EDGE ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☒ Claim(s) 1-39 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-5, 7-12, 17, 19-26 and 28-36 rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto with filling date of November 3, 1997.

2. Claim 1.

“A method comprising: generating gray elements and a dithered gray background for display on a display device, the dithered gray background representing a gray level of approximately 25 to 40%; and estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background”, the step of gray level of approximately 25-40% is inherent because, Yamamoto discloses in page 1 paragraph 9, to adjust a background for a display image, allow the user to freely set the background color so as to satisfactorily reproduce the color tone of the display image (meaning the background level can be adjusted between 1-100%). Yamamoto illustrates in Fig. 4 the background color setting, automatic setting and RGB setting; in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. And also Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back)

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background color. Yamamoto illustrates in Fig. 7 a flow chart of a control window for setting display conditions of a preview window.

3. Claim 2.

“The method of claim 1, wherein the dithered gray background represents a gray level of approximately 33%”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

4. Claim 3.

“The method of claim 1, wherein the gray elements include green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

5. Claim 4.

“The method of claim 1, further comprising characterizing the colorimetric response of the display device based on the estimated gamma”, Yamamoto illustrates in Fig. 6 a preview

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processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

6. Claim 5.

“The method of claim 1, the method further comprising: modifying a color image based on the estimated gamma; and delivering the modified color image to the display device”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

7. Claim 7.

“The method of claim 1, wherein estimating the gamma includes: selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background; estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements; selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the

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first plurality of gray elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

8. Claim 8.

“The method of claim 7, wherein the first plurality of gray elements represent greater gradations in gray intensity than the second plurality of gray elements”, The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

9. Claim 9.

“The method of claim 1, wherein the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or

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selected red-blue shifted element”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

10. Claim 10.

“The method of claim 9, wherein the red-blue shifted elements represent shifts in red, blue, or a combination of red and blue away from the color value of the selected green element”,

Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color.

11. Claim 11.

“The method of claim 9, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

12. Claim 12.

“The method of claim 1, further comprising: estimating both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance”, Yamamoto illustrates in Fig. 8 the

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chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

13. Claim 17.

“The system of claim 5, wherein the dithered gray background represents a gray level of approximately 33%”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

14. Claim 19.

“The system of claim 18, wherein the color profiling process includes: selecting one of the selected green element and the plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element”, Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

15. Claim 20.

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“The system of claim 19, wherein the red-blue shifted elements represent shifts in red, blue, or a combination of red and blue away from the color value of the selected green element”,

Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

16. Claim 21.

“The system of claim 19, wherein the red-blue shifted elements do not represent any substantial shift in green away from the color value of the selected green element”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

17. Claim 22.

“The system of claim 18, wherein estimating the gamma includes: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of

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green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma”, Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels. Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color.

18. Claim 23.

“The system of claim 22, wherein the first plurality of green elements represent greater gradations in green intensity than the second plurality of green elements”, The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

19. Claim 24.

“The system of claim 15, wherein the color profiling process includes: estimating both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a

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luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

20. Claim 25.

“A computer-readable medium containing instructions that cause a programmable processor to: display a plurality of gray elements on a display device against a dithered gray background representing a gray level of approximately 25 to 40%; select one the gray elements that appears to most closely blend with a dithered gray background; and estimate a gamma for the display device based on the selected gray element”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

21. Claim 26.

“The computer-readable medium of claim 25, wherein the dithered gray background represents a gray level of approximately 33%”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

22. Claim 28.

“The computer-readable medium of claim 25, wherein the instructions cause the processor to characterize the colorimetric response of the display device based on the estimated gamma”, Yamamoto illustrates in Fig. 8 the chromaticity value uses Y, x, and y values including a

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luminance Y and chromaticity coordinates (x, y) of the CIE1931 colorimetric system (XYZ colorimetric system).

23. Claim 29.

“The computer-readable medium of claim 25, wherein the instructions cause the processor to: modify a color image based on the estimated gamma; and deliver the modified color image to the display device”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

24. Claim 30.

“The computer-readable medium of claim 25, wherein the display device is associated with a client residing on a computer network, and wherein the instructions cause the processor to: transmit information representing the estimated gamma to a remote server on the network; modify the color image at the remote server based on the information; and deliver the modified color image to the client via the computer network for display on the display device”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and black) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that

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allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

25. Claim 31.

“The computer-readable medium of claim 25, wherein the instructions cause the processor to estimate the gamma by: selecting one of a first plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background; estimating a coarse gamma for the display device based on the selected one of the first plurality of gray elements; selecting one of a second plurality of gray elements displayed by the display device that appears to most closely blend with the dithered gray background, wherein the second plurality of gray elements includes the selected one of the first plurality of gray elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of gray elements, wherein the estimated fine gamma is the estimated gamma”, Yamamoto illustrates in Fig. 6 a preview processing setting to estimate most closely blend with a gray (combination of white and back) background color. Yamamoto illustrates in Fig. 5 a display example of a control window for setting the R, G, and B values of the background color that allows the user to independently input the R, G, and B values of the background color to estimate gamma for a green or red or blue and for combination of red and blue channels.

26. Claim 32.